

# PATENT COOPERATION TREATY

From the  
INTERNATIONAL SEARCHING AUTHORITY

To:

see Form PCT/ISA/220

## PCT

WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43bis.1)

Date of mailing  
(day/month/year) see Form PCT/ISA/210 (second page)

Applicant's or agent's file reference  
see Form PCT/ISA/220

**FOR FURTHER ACTION**  
See paragraph 2 below

International application No.  
PCT/FR2004/002563

International filing date (day/month/year)  
11.10.2004

Priority date (day/month/year)  
05.11.2003

International Patent Classification (IPC) or both national classification and IPC  
F42B15/38, F15B15/19

Applicant  
EADS SPACE TRANSPORTATION SA

1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☐ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43bis.1 (a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☐ Box No. VIII Certain observations on the international application

### 2. FURTHER ACTION

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires earlier.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

#### Name and mailing address of the ISA



European Patent Office - P.B. 5818 Patentlaan 2  
NL-2280 HV Rijswijk - Netherlands  
Tel: +31 70 340 - 2040 Tx: 31 651 epo nl  
Fax: +31 70 340 - 3016

#### Authorized officer

Calvo De No, R

Telephone No. +31 70 340-3113



**WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY**

International application No.  
PCT/FR2004/002563

**10/ 551 960**

**Box No. 1. Basis of this opinion**

1. With regard to the **language**, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.
  - ☐ This opinion has been established on the basis of a translation from the original language into the following language , which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b)).
2. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:
  - a. type of material
    - ☐ a sequence listing
    - ☐ table(s) related to the sequence listing
  - b. format of material
    - ☐ in written format
    - ☐ in computer readable form
  - c. time of filing/furnishing
    - ☐ contained in the international application as filed.
    - ☐ filed together with the international application in computer readable form.
    - ☐ furnished subsequently to this Authority for the purposes of search.
3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4. Additional comments:

---

**Box No. V Reasoned statement under Rule 43*bis*.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

---

1. Statement

Novelty (N)	Yes:	Claims	1-10
	No:	Claims	
Inventive Step (IS)	Yes:	Claims	1-10
	No:	Claims	
Industrial Applicability (IA)	Yes:	Claims	1-10
	No:	Claims	

---

2. Citations and explanations:

**see separate sheet**

Regarding point V.

- 1 Reference is made to the following document in this notification:  
D1: FR 2 638 338 A (OEA INC) April 27, 1990 (1990-04-27)
- 2 Document D1, which is considered to represent the most relevant state of the art, describes (the bracketed references apply to that document):

A pyrotechnically ruptureable composite structural component intended to transmit forces between a first and a second structural element (11, 12) and provided with elongate pyrotechnic detonation separation means (17) incorporated into said structural component and able to break it so that said first element can be separated from said second element along a line of separation,

from which the subject matter of the independent claim 1 differs in that:

The component comprises a first part in which said pyrotechnic separation means are incorporated and which is able to be connected to said first element, a second part able to be connected to said second element and means of rigid assembly of said first and second parts by their free ends which are the opposite ends to said first and second elements, respectively: and said assembly means comprise damping means arranged between the free ends of said first and second elements and able to damp the detonation shock propagating to the free end of said first part when said pyrotechnic separation means are detonated.

- 2.1 The subject matter of claim 1 is therefore novel (Article 33(2) PCT).  
The problem that the present invention sets out to solve may be considered as that of damping the shock of the detonation of said pyrotechnic separation means.
- 2.2 The solution to this problem proposed in claim 1 of this application is considered to involve an inventive step (Article 33(3) PCT), this being because the characteristics of this solution have not been suggested beforehand as a solution to this problem.
- 2.3 Claims 2-10 are dependent on claim 1 and therefore also, as such, satisfy the conditions required by the PCT regarding novelty and inventive step.